

APPARATUS AND METHOD FOR PROVIDING A USEFULNESS METRIC  
BASED ON CODING INFORMATION FOR VIDEO ENHANCEMENT

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## ABSTRACT OF THE DISCLOSURE

An apparatus and method is disclosed for enhancing the quality of a digital video signal using coding information. The sharpness of previously encoded or transcoded digital video images is enhanced without enhancing encoding artifacts. The invention may be used in connection with spatial domain sharpness enhancement algorithms used in multimedia devices. The apparatus comprises a usefulness metric generator that identifies a limit to the sharpness enhancement of an image that can be applied to a previously coded digital video that represents a sequence of images without enhancing coding artifacts. The usefulness metric generator applies the usefulness metric to at least one sharpness enhancement algorithm. The usefulness metric and the sharpness enhancement algorithm are separate so that the usefulness metric can be used with a variety of video enhancement algorithms.